

# Liftcrane Mast Handling Capacities

Operating Limits for Crane Assembly - Gantry Up Crawler with 48 in. Treads Drum 2 only

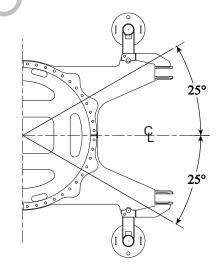
**HANDLING CAPACITIES:** Handling capacities are for crane self-assembly using live mast. Weight of block, slings, hoist lines, etc., beneath live mast sheaves is considered part of load. Where no capacity is shown, operation is not intended or approved.

**OPERATING CONDITIONS:** Machine to operate on firm, level and uniformly supporting surface. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. <u>Refer to the Operator Manual for operating guidelines.</u>

**MACHINE EQUIPMENT:** Machine equipped with 10 ft 3 in. gantry in up position, 27 ft live mast and 20 part boom hoist reeving.

**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation to center of vertical hoist line. Mast angle in degrees (°) is angle between horizontal and centerline of mast measured from transport position, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

| 27 ft Mast          |               |                   |                      |
|---------------------|---------------|-------------------|----------------------|
| Operating<br>Radius | Mast<br>Angle | Crane on<br>Jacks | Crane on<br>Crawlers |
| Feet                | Degrees       | Pounds            | Pounds               |
| 8                   | 97.9          | 45,000            | 45,000               |
| 10                  | 102.0         | 45,000            | 45,000               |
| 12                  | 106.2         | 45,000            | 45,000               |
| 14                  | 110.5         | 45,000            | 45,000               |
| 16                  | 114.9         | 45,000            | 45,000               |
| 18                  | 119.5         |                   | 45,000               |
| 20                  | 124.3         |                   | 45,000               |
| 22                  | 129.4         |                   | 45,000               |
| 24                  | 135.0         |                   | 45,000               |
| 26                  | 141.2         |                   | 45,000               |
| 28                  | 148.5         |                   | 45,000               |



## Swing Diagram

#### **Operating Restrictions on Jacks** (four jacks, no crawlers)

8 ft to 16 ft operating radius —

- 360 degree swing permitted for handling loads.
- 8 ft to 28 ft operating radius -
- 360 degree swing permitted for handling hooks and chains.
- Greater than 28 ft operating radius —
- Block installation only drum operation not permitted (mast lacing interference).

# Operating Restrictions on Jacks with One Crawler

**Installed** (four jacks with one crawler installed, OR two jacks with one crawler installed and on ground)

8 ft to 16 ft operating radius -

- 25 degree swing either side of center permitted for handling loads. Refer to swing diagram.
- 8 ft to 28 ft operating radius 360 degree swing permitted for handling hooks and chains.

## Operating Restrictions on Crawlers

8 ft to 28 ft operating radius -

360 degree swing permitted for handling loads.

Greater than 28 ft operating radius —

Block installation only - drum operation not permitted (mast lacing interference).